

GOVERNMENT OF INDIA
MINISTRY OF STEEL

LOK SABHA
UNSTARRED QUESTION NO.3277
FOR ANSWER ON 09/08/2021

R&D IN IRON AND STEEL SECTOR

3277. SHRI ADALA PRABHAKARA REDDY:
SHRI HEMANT SRIRAM PATIL:

Will the Minister of STEEL be pleased to state:

- (a) the funds sanctioned under the scheme 'Promotion of Research & Development (R&D) in Iron and Steel' Sector during the last two years;
- (b) the details of energy efficient and environment friendly technologies adopted as a part of technological up-gradation/ modernisation/ expansion of projects;
- (c) whether any new methods have been found out to better treat the waste from the steel sector in an environment friendly manner; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STEEL

(SHRI RAM CHANDRA PRASAD SINGH)

(a) The funds sanctioned for the scheme "Promotion of Research & Development in Iron & Steel Sector" for the years 2020-21 and 2021-22 are given below:-

Financial Year	Fund Sanctioned (in Rs. crore)
2020-21	5.00
2021-22	5.00

(b) The steel industry is adopting energy efficient and environment friendly technologies as part of technological up-gradation/ modernisation/ expansion of programme/ projects. Some of these are:-

- Coke Dry Quenching (CDQ) - Power generation from the waste heat from CDQ.
- Sinter Plant Heat Recovery (Power generation from Sinter Cooler Waste Heat).
- Bell Less Top Equipment (BLT) in Blast Furnace.
- Top Pressure Recovery Turbine (TRT) in Blast Furnace.
- Pulverized Coal Injection (PCI) system in Blast Furnace.
- Hot stove waste heat recovery in Blast Furnace.
- Dry type Gas Cleaning Plant (GCP) in Blast Furnace.
- Cast House/ Stock House Dedusting system.
- Converter Gas Recovery in BOF.

Contd.....2/-

- Energy Monitoring & Management System.
- Secondary Fume Extraction System in Steel Melting Shop.
- Regenerative Burners in Re-heating Furnaces of Rolling Mills.
- Hot charging process of continuously cast products at higher temperature directly to Rolling Mills.
- Direct Rolling Process eliminating the need for Re-heating furnaces.
- Energy efficient technology for Hot Strip Mill: Flexible Thin Slab casting & Rolling.
- Near Net Shape casting: Bloom cum Beam Blank caster, Bloom cum Round caster etc.
- Adoption of Variable Voltage Variable Frequency (VVVF) Drives for high capacity electric motors.

(c)&(d): The wastes being generated are effectively recycled back within the steel plants. Some wastes such as Blast Furnace slag is granulated within the steel plant and sold to cement industry. Research & Development projects have also been undertaken for effective utilization of steel slag in road making, construction, agriculture etc.
